



Diabetes 2017 Report Card



**Centers for Disease
Control and Prevention**
National Center for Chronic
Disease Prevention and
Health Promotion

For More Information

Division of Diabetes Translation
National Center for Chronic Disease Prevention and Health Promotion
Centers for Disease Control and Prevention
4770 Buford Hwy, Mailstop F-75
Atlanta, GA 30341-3717

1-800-CDC-INFO (232-4636); TTY: 1-888-232-6348

[Contact CDC-INFO](#)

This publication is available at
www.cdc.gov/diabetes/library/reports/congress.html

Suggested Citation

Centers for Disease Control and Prevention. *Diabetes Report Card 2017*. Atlanta, GA: Centers for Disease Control and Prevention, US Dept of Health and Human Services; 2018.

Website addresses of nonfederal organizations are provided solely as a service to readers. Provision of an address does not constitute an endorsement of this organization by CDC or the federal government, and none should be inferred. CDC is not responsible for the content of other organizations' Web pages.



Background

The *Diabetes Report Card* has been published by the Centers for Disease Control and Prevention (CDC) every 2 years since 2012 to provide current information on the status of diabetes and its complications in the United States. It includes information and data on diabetes, preventive care practices, health outcomes, and risk factors such as race, ethnicity, socioeconomic position, and prediabetes.

The *Diabetes Report Card* also includes trend analysis for the nation and, to the extent possible, state progress in meeting established national goals and objectives for improving diabetes care and reducing health care costs and the rate of new cases. Public health professionals, state health departments, and communities can use these data to focus their diabetes prevention and control efforts on areas of greatest need.^{1,2}

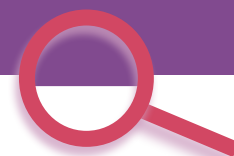
Diabetes Overview

Diabetes is a group of diseases characterized by high blood sugar. When a person has diabetes, the body either does not make enough insulin (type 1) or is unable to properly use insulin (type 2). When the body does not have enough insulin or cannot use it properly, blood sugar builds up in the blood.

People with diabetes can develop high blood pressure and high cholesterol and triglycerides (lipids). High blood sugar, particularly when combined with high blood pressure and lipids, can lead to heart disease, stroke, blindness, kidney failure, amputations of the legs and feet, and even early death. Diabetes is the seventh leading cause of death in the United States.

What's New?

- The rate of new cases of diabetes among US adults has gone down.
- The rate of new cases of diabetes among children and adolescents has gone up.
- The first national prediabetes awareness campaign was launched.
- New diabetes resources have been developed to help employers, health insurers, and states.



Diabetes Incidence and Prevalence

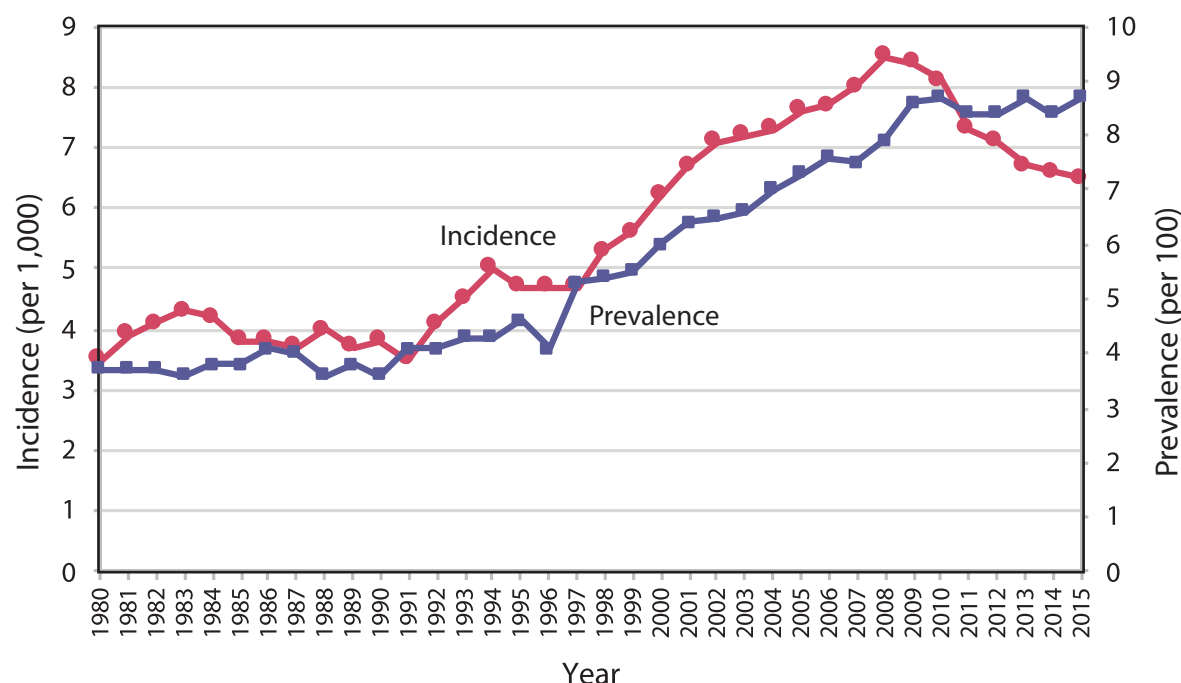
Diabetes incidence—which is the rate of new cases of diagnosed diabetes—among adults in the United States went down in 2015 and has gone down each year since 2008 (Figure 1). About 1.4 million new cases of diabetes were diagnosed among adults aged 18 to 79 in 2015.

Diabetes prevalence—which is the total number of existing cases, including new cases—among adults continues to go up (Figure 1). About 30.3 million people, or 9.4% of the US population, had diabetes in 2015. This total included 30.2 million adults aged 18 or older, or 12.2% of all US adults. About 7.2 million of these adults had diabetes but were not aware that they had the disease or did not report that they had it.³ Although the prevalence of adults with diagnosed diabetes went up sharply during the 1990s, it appears to have been stabilizing since 2009 (Figure 1).

The increase in the number of adults with diabetes in the United States may be due in part to people with the disease living longer because of improvements in self-management practices and health care services. As of 2016, more than 4,100 diabetes self-management education and support (DSMES) programs were offered across the United States.

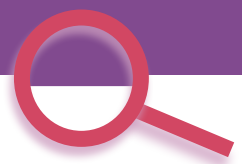
DSMES programs are intended to improve preventive practices among people with diabetes.⁴ About 1.1 million people with diabetes participated in DSMES programs recognized by the American Diabetes Association (ADA) or accredited by the American Association of Diabetes Educators (AADE) in 2016.

Figure 1. Trends in Incidence and Prevalence of Diagnosed Diabetes Among Adults Aged 18 or Older, United States, 1980–2015



Note: Rates are age-adjusted to the 2000 US standard population.

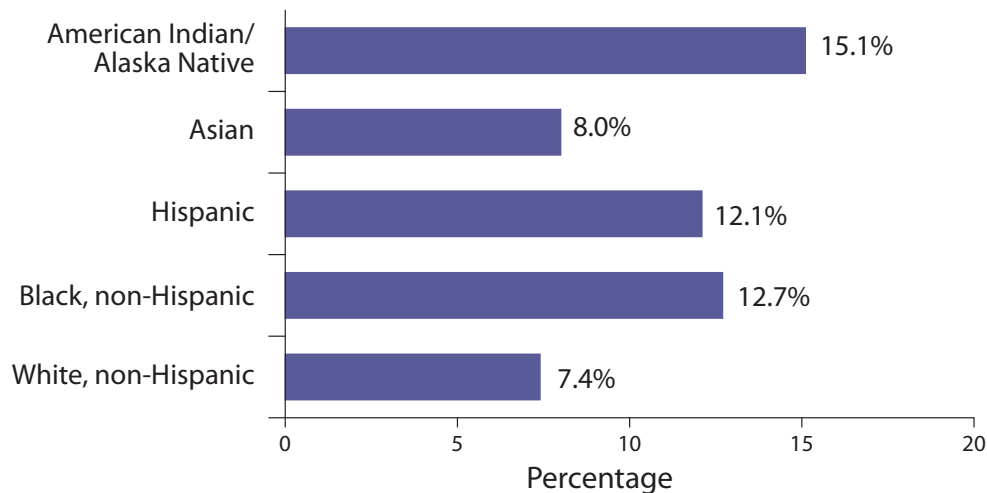
Data sources: Centers for Disease Control and Prevention, United States Diabetes Surveillance System and National Health Interview Survey.



Race, Ethnicity, and Education

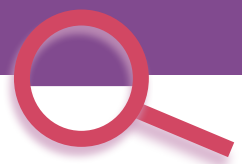
Members of some racial and ethnic minority groups are more likely to have diagnosed diabetes than non-Hispanic whites. Among adults, American Indians/Alaska Natives had the highest age-adjusted rates of diagnosed diabetes among all racial and ethnic groups examined (Figure 2).³

Figure 2. Percentage of US Adults Aged 18 or Older With Diagnosed Diabetes, by Racial and Ethnic Group, 2013–2015



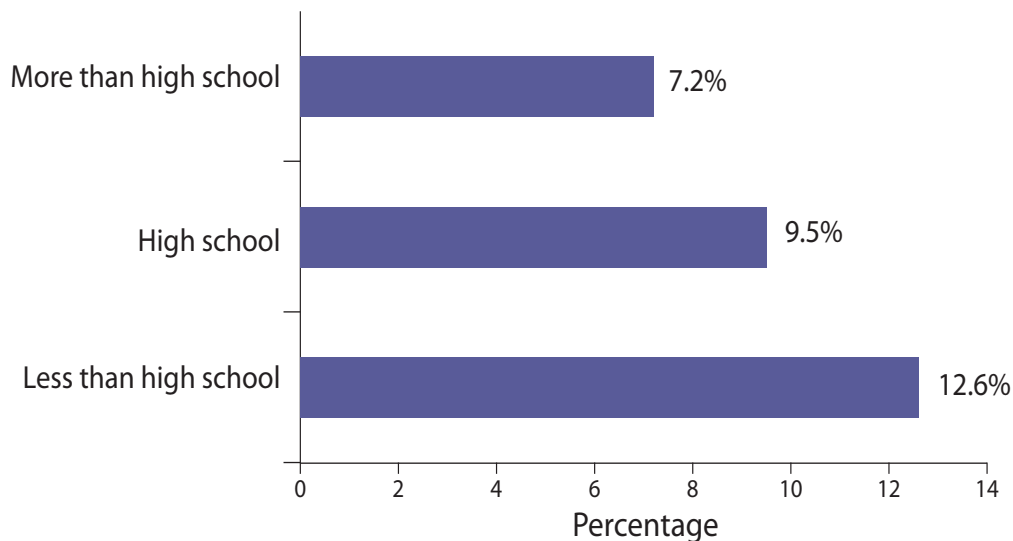
Notes: Percentages are age-adjusted to the 2000 US standard population. Figure adapted from the *National Diabetes Statistics Report, 2017*. Data sources: 2013–2015 National Health Interview Survey and 2015 Indian Health Service National Data Warehouse (American Indian/Alaska Native data).





A higher percentage of adults with less than a high school education had diagnosed diabetes compared to adults with a high school education or more than a high school education (Figure 3).³

Figure 3. Percentage of US Adults Aged 18 or Older With Diagnosed Diabetes, by Education Level, 2013–2015



Notes: Percentages are age-adjusted to the 2000 US standard population. Figure adapted from the *National Diabetes Statistics Report, 2017*. Data source: 2013–2015 National Health Interview Survey.

A person's socioeconomic position is defined by his or her education and income level. Differences in diabetes prevalence were seen in the overall US population and within racial and ethnic groups according to socioeconomic position. For example, the prevalence of diabetes increased among non-Hispanic whites with less education and lower incomes and among Hispanics with less education.⁵ In addition, an association was found between lower education levels and less use of preventive care practices, such as annual foot and eye exams and regular monitoring of blood sugar levels.⁶

Research suggests that the effectiveness of interventions designed to help people reduce their risk of type 2 diabetes and manage or prevent complications can vary by socioeconomic position.⁵ Healthy People 2020, the nation's agenda for improving the health of all Americans, and recent studies have identified socioeconomic position as an important factor to consider when evaluating the effectiveness of interventions.^{5,7}

Geographic Distribution of Diagnosed Diabetes in Adults

CDC’s Division of Diabetes Translation works with state and local health departments, tribes, territories, health care providers, caregivers, and community organizations to identify people with diabetes and diabetes-related complications and help them manage and improve their health. Table 1 shows the percentage of US adults, by state, who reported that they have ever been told by a health care provider that they have diabetes. Estimates range from 6.4% in Colorado to 13.6% in Mississippi.



Table 1 Note: Percentages are age-adjusted to the 2000 US standard population. Data sources: Centers for Disease Control and Prevention, United States Diabetes Surveillance System and National Health Interview Survey.

Table 1. Percentage of US Adults Aged 18 or Older With Diagnosed Diabetes, by State, 2015

State	Percentage
All States (Median)	9.1
Alabama	12.0
Alaska	7.8
Arizona	9.1
Arkansas	11.2
California	9.6
Colorado	6.4
Connecticut	8.1
Delaware	9.9
District of Columbia	9.3
Florida	9.3
Georgia	10.7
Hawaii	7.8
Idaho	7.3
Illinois	9.1
Indiana	10.5
Iowa	7.7
Kansas	8.9
Kentucky	12.1
Louisiana	11.8
Maine	8.2
Maryland	9.4
Massachusetts	8.0
Michigan	9.5
Minnesota	6.9
Mississippi	13.6
Missouri	10.2
Montana	6.7
Nebraska	8.0
Nevada	9.0
New Hampshire	6.8
New Jersey	7.9
New Mexico	10.5
New York	8.9
North Carolina	9.6
North Dakota	8.1
Ohio	9.5
Oklahoma	10.7
Oregon	9.6
Pennsylvania	8.8
Rhode Island	7.9
South Carolina	10.5
South Dakota	8.4
Tennessee	11.4
Texas	11.2
Utah	7.5
Vermont	7.1
Virginia	9.6
Washington	7.7
West Virginia	12.5
Wisconsin	7.4
Wyoming	7.6

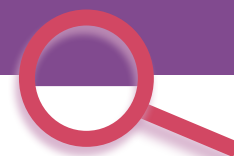
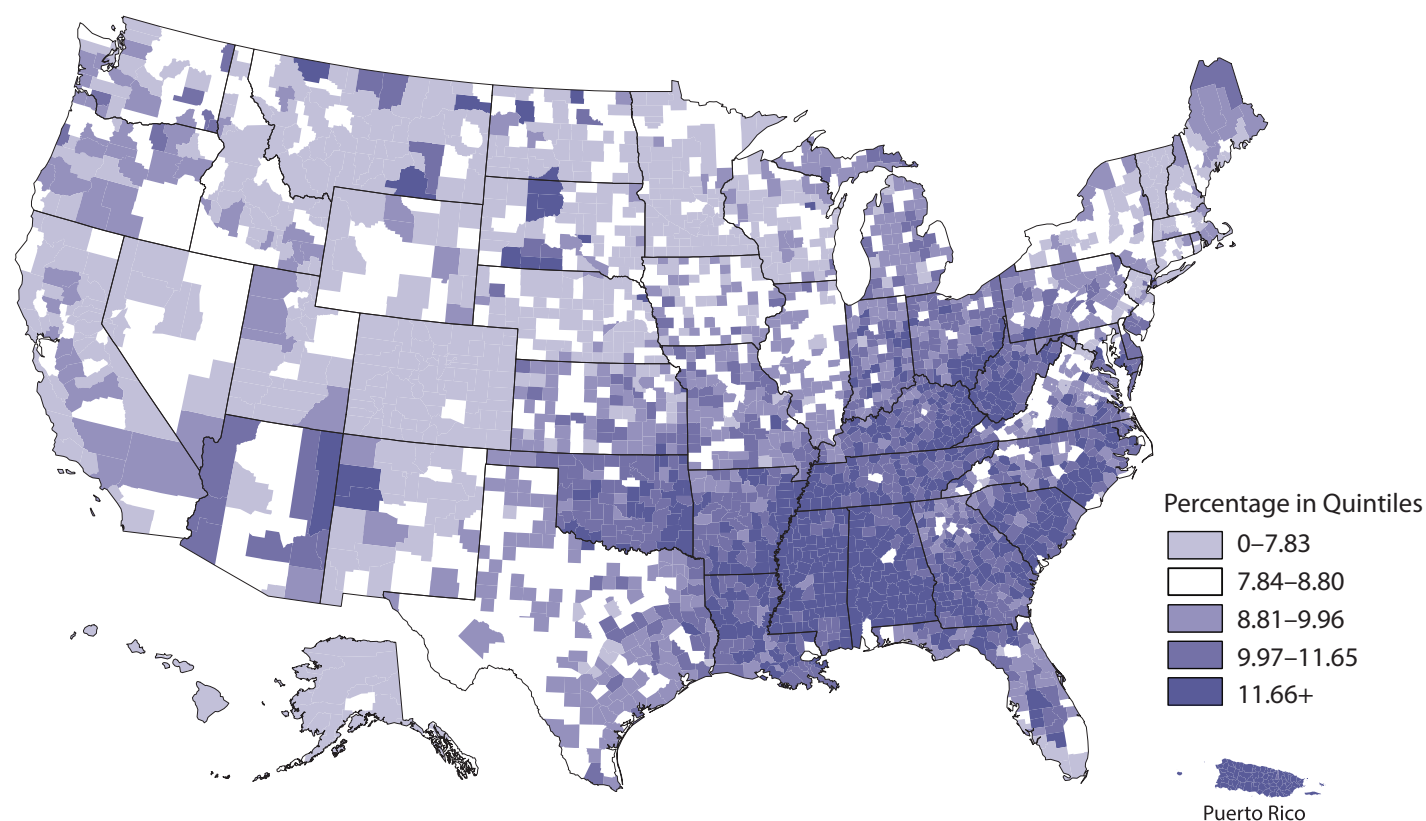


Figure 4 shows the geographic distribution of diagnosed diabetes in adults across US counties in 2013. Percentages are generally higher in the Southeast. Southern and Appalachian portions of the United States have the highest prevalence. County-level data can help researchers and public health officials identify and work to reduce gaps in diabetes

care. Although ADA-recognized or AADE-accredited DSMES programs are offered in 56% of counties across the United States, 62% of rural counties do not have a DSMES program. DSMES programs can help people with diabetes improve their health and reduce their risk of complications.⁴

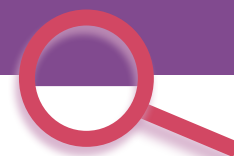
Figure 4. County-Level Distribution of Diagnosed Diabetes Among US Adults Aged 20 or Older, 2013



Note: Percentages are age-adjusted to the 2000 US standard population.

Data source: United States Diabetes Surveillance System.

See current data at www.cdc.gov/diabetes/data/countydata/countydataindicators.html.

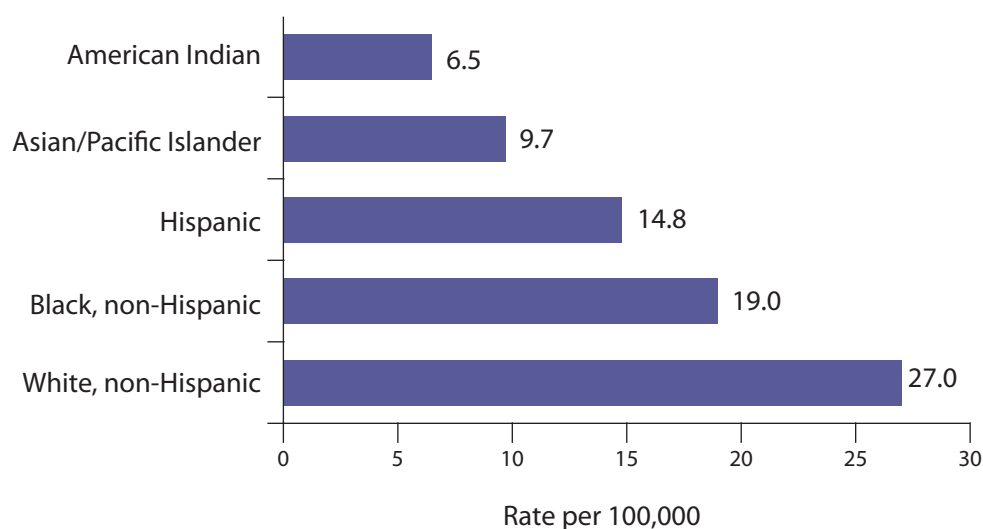


Of the estimated 23 million people with diagnosed diabetes in 2015, about 193,000 were children and adolescents younger than age 20.³ The increasing frequency of both type 1 and type 2 diabetes in young people is a growing clinical and public health concern. Since 2000, CDC and the National Institutes of Health have funded the [SEARCH for Diabetes in Youth Study](#). This multicenter study is designed to learn more about type 1 and type 2 diabetes among children and young adults in the United States.

Early findings from the SEARCH study indicated that the prevalence of both type 1 and type 2 diabetes

increased among young people during 2001–2009.⁸ Later findings indicated that incidence also went up during 2002–2012. The annual relative increase for type 1 diabetes was 1.8%, while the increase for type 2 diabetes was 4.8%. About 17,900 children and adolescents younger than age 20 were newly diagnosed with type 1 diabetes during 2011–2012, with the highest rate of new cases among non-Hispanic whites (Figure 5). About 5,300 young people aged 10 to 19 years were newly diagnosed with type 2 diabetes during 2011–2012, and those who were members of racial or ethnic minority groups had the highest rates of new cases (Figure 6).⁹

Figure 5. Incidence of Type 1 Diabetes Among US Children and Adolescents Aged 0 to 19 Years, by Race/Ethnicity, 2011–2012



Note: American Indian youth who participated in the SEARCH study are not representative of all American Indian youth in the United States. Thus, these rates cannot be generalized to all American Indian youth nationwide.
Data source: SEARCH for Diabetes in Youth Study.



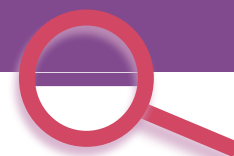
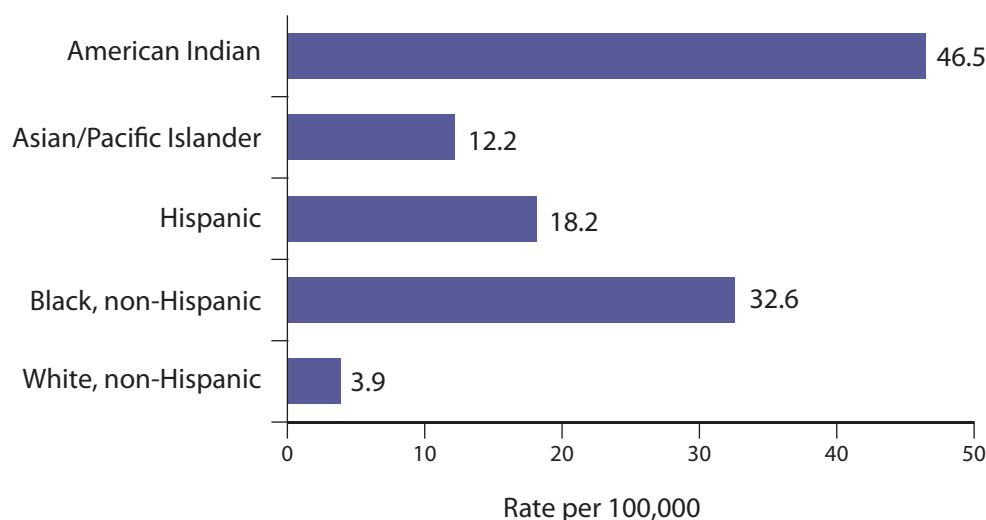


Figure 6. Incidence of Type 2 Diabetes Among US Children and Adolescents Aged 10 to 19 Years, by Race/Ethnicity, 2011–2012

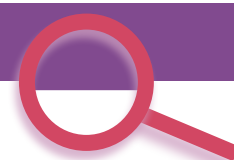


Note: American Indian youth who participated in the SEARCH study are not representative of all American Indian youth in the United States. Thus, these rates cannot be generalized to all American Indian youth nationwide.
Data source: SEARCH for Diabetes in Youth Study.

The SEARCH study also found that deaths from diabetes among all US children and adolescents aged 1 to 19 years went down, from 265 during 2000–2002 to 228 during 2012–2014. Although diabetes deaths among children and adolescents went down over time, the death rate among non-Hispanic black children and adolescents was about twice as high compared to

non-Hispanic white children and adolescents during 2012–2014. Additional research to identify health care factors and behaviors that contribute to diabetes deaths among children and adolescents may help public health officials understand the reasons for differences by race or ethnicity so they can focus their future prevention efforts more effectively.¹⁰

PREVENTIVE CARE PRACTICES



Diabetes-related complications can be serious, costly, and deadly. They include heart disease, stroke, kidney damage (chronic kidney disease and kidney failure), blindness, and amputations of the legs and feet. Diabetes-related complications are more likely and more severe among people whose diabetes is not well managed and those who have had diabetes longer.

People with diabetes can better manage their condition and improve their health by following preventive care practices. These practices include receiving annual foot and eye exams and attending

diabetes self-management classes. Table 2 presents estimates of the percentage of US adults aged 18 or older with diagnosed diabetes who reported receiving recommended preventive care practices by state.

Healthy People 2020 monitors progress toward increasing the percentage of people with diagnosed diabetes who follow preventive care practices. Table 3 shows the Healthy People 2020 target percentages for each practice and the all-states median percentages for each practice during 2011–2015.

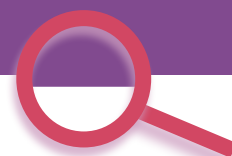


Table 2. Percentage of US Adults Aged 18 or Older With Diagnosed Diabetes Who Reported Receiving Recommended Preventive Care Practices, by State, 2015

State	Two or more A1c Tests in the Last Year	Foot Exam by Health Professional in the Last Year	Ever Attended Diabetes Self-Management Class	Dilated Eye Exam in the Last Year	Daily Self-Monitoring of Blood Glucose
Alabama ^a	69.6	69.7	53.4	60.6	69.2
Alaska ^b	62.2	76.1	59.0	57.4	68.3
Arizona	66.8	66.0	49.9	61.5	64.1
Arkansas ^a	53.3	61.4	50.6	57.9	67.4
California	63.9	62.9	64.5	59.7	42.7
Colorado	63.2	67.9	54.4	61.1	55.6
Connecticut	74.8	72.8	47.7	64.6	61.1
Delaware	72.2	78.6	48.5	63.4	59.4
District of Columbia	71.5	79.1	53.0	66.1	72.0
Florida	74.4	52.4	45.2	62.1	62.2
Georgia	63.5	65.2	52.9	65.6	61.3
Hawaii	73.4	74.4	58.4	68.6	51.7
Idaho ^c	NA ^c	NA	NA	NA	NA
Illinois	67.9	74.2	61.4	61.5	70.2
Indiana	73.1	70.6	59.2	49.8	64.2
Iowa	78.7	79.3	65.2	64.1	65.9
Kansas	71.4	69.6	59.8	64.6	58.7
Kentucky	74.5	69.3	50.0	61.2	64.5
Louisiana	64.8	62.5	46.1	56.5	56.7
Maine ^b	77.3	80.8	59.3	60.6	60.7
Maryland	75.4	75.7	59.0	61.9	65.9
Massachusetts ^a	73.4	72.0	45.8	76.7	70.1
Michigan	65.7	71.6	60.0	62.9	64.3
Minnesota	75.4	81.4	69.1	74.4	64.8
Mississippi ^b	65.1	62.1	45.0	58.9	59.7
Missouri ^a	66.1	57.1	65.9	60.7	61.8
Montana ^b	72.8	82.7	63.1	56.1	41.6
Nebraska	69.1	66.0	59.5	61.9	59.5
Nevada	69.6	74.1	74.0	65.3	75.9
New Hampshire	80.0	86.4	60.2	66.6	58.4
New Jersey	65.8	61.1	42.7	58.0	60.0
New Mexico	73.6	75.9	48.1	61.2	65.5
New York	77.3	71.5	34.8	67.0	56.1
North Carolina	80.5	77.6	62.5	61.6	73.4
North Dakota ^b	66.1	82.7	66.8	58.0	65.5
Ohio ^b	68.1	68.6	63.9	60.0	64.1
Oklahoma	65.0	66.0	51.1	55.1	72.9
Oregon ^a	67.1	73.2	56.1	54.9	57.7
Pennsylvania	73.3	81.0	50.5	69.0	63.7
Rhode Island	80.3	76.8	56.8	60.7	70.9
South Carolina	69.2	63.9	54.1	56.5	62.1
South Dakota ^b	76.8	68.0	62.9	67.9	53.0
Tennessee	67.2	60.0	48.8	52.6	65.2
Texas	59.7	62.9	59.3	59.2	57.5

Table 2 continued on next page

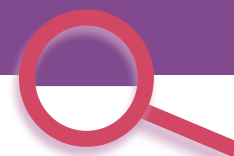


Table 2, continued

State	Two or more A1c Tests in the Last Year	Foot Exam by Health Professional in the Last Year	Ever Attended Diabetes Self-Management Class	Dilated Eye Exam in the Last Year	Daily Self-Monitoring of Blood Glucose
Utah	69.8	71.2	60.4	57.9	60.4
Vermont	71.6	72.8	45.7	66.7	67.5
Virginia	69.4	72.7	53.7	64.9	52.9
Washington	71.4	74.2	63.1	58.7	63.0
West Virginia ^b	77.9	70.1	54.6	54.8	71.1
Wisconsin	72.1	71.6	66.9	71.6	64.8
Wyoming	69.5	60.3	52.4	61.0	65.3

Note: Percentages are age-adjusted to the 2000 US standard population.

Data source: Centers for Disease Control and Prevention, United States Diabetes Surveillance System and National Health Interview Survey.

^a Data for 5 states are from 2013 because 2014 and 2015 data were not available.

^b Data for 8 states are from 2014 because 2015 data were not available.

^c Data for Idaho were not available for 2013, 2014, or 2015.

Table 3. Healthy People 2020 Targets and All-States Median Percentages of US Adults Aged 18 or Older With Diagnosed Diabetes Who Reported Receiving Recommended Preventive Care Practices, 2011–2015

Year	Two or more A1c Tests in the Last Year	Foot Exam by Health Professional in the Last Year	Ever Attended Diabetes Self-Management Class	Dilated Eye Exam in the Last Year	Daily Self-Monitoring of Blood Glucose
Healthy People 2020 Target	71.1	74.8	62.5	58.7	70.4
2011	68.8	70.8	56.3	60.1	64.2
2012	69.1	69.1	55.3	59.7	63.5
2013	67.3	69.2	55.8	59.5	64.1
2014	68.0	68.0	55.3	58.8	63.5
2015	71.4	71.6	54.4	61.6	63.0

Notes: Percentages are age-adjusted to the 2000 US standard population. Percentages in bold meet or exceed the Healthy People 2020 target.

Data sources: Centers for Disease Control and Prevention, United States Diabetes Surveillance System and National Health Interview Survey.

The only recommended practice that consistently met or exceeded the Healthy People 2020 target was the dilated eye exam. In 2015, the goal of having two or more A1c tests in the last year was also met. The all-states median percentage for ever attending a diabetes self-management class was the lowest among all of the preventive care practices. DSMEs programs can increase the use of preventive care services, help improve quality of life for people with diabetes, and reduce health care costs by lowering the risk of complications.¹¹ However, barriers such as not having insurance coverage and living in a rural area can make it hard for some people to participate. To address gaps in diabetes preventive care, more research may help find new ways to overcome the challenges that prevent people from accessing DSMEs programs.⁴

Additional national and state data are available in the [United States Diabetes Surveillance System](#). This interactive web application allows users to view data in the form of customized maps, charts, and tables on desktop and mobile devices. The [Healthy People 2020 Diabetes](#) website provides additional diabetes-specific objectives and recommended practices.

In addition to the number of people who already have diabetes, CDC estimates that 84.1 million US adults aged 18 years or older had prediabetes in 2015. With prediabetes, blood sugar levels are higher than normal but not high enough for a diabetes diagnosis. Prediabetes can increase a person's risk of type 2 diabetes, heart disease, and stroke. Although an estimated 33.9% of US adults had prediabetes in 2015, only 11.6% were aware of it.³ Table 4 shows the percentage of US adults, by state, who said they have ever been told by a health care professional that they have prediabetes.



Table 4. Percentage of US Adults Who Have Ever Been Told by a Health Care Professional That They Have Prediabetes, by State, 2015

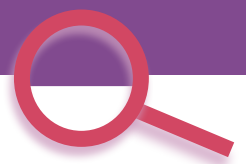
State	Percentage
All-States Median^a	7.0
Alabama	6.1
Alaska	6.6
Arizona ^b	7.6
Arkansas ^c	5.4
California ^b	8.2
Colorado ^b	6.3
Connecticut ^b	6.1
Delaware ^b	6.9
District of Columbia	9.2
Florida	7.3
Georgia	6.8
Hawaii ^b	14.0
Idaho ^b	7.8
Illinois ^b	5.8
Indiana ^b	6.4
Iowa ^b	6.6
Kansas ^b	5.5
Kentucky	6.7
Louisiana	7.1
Maine	6.9
Maryland ^b	8.4
Massachusetts ^b	5.7
Michigan ^b	6.8
Minnesota ^b	6.2
Mississippi ^b	6.1
Missouri ^b	6.9
Montana ^c	5.8
Nebraska ^b	5.4
Nevada ^b	7.4
New Hampshire ^c	5.5
New Jersey ^b	7.4
New Mexico	7.1
New York	6.8
North Carolina	7.2
North Dakota ^b	6.1
Ohio	6.1
Oklahoma	7.1
Oregon ^b	8.0
Pennsylvania ^b	6.0
Rhode Island ^b	5.7
South Carolina	7.1
South Dakota	5.5
Tennessee	7.3
Texas	6.4
Utah ^c	5.7
Vermont ^b	4.8
Virginia	6.9
Washington	7.0
West Virginia	7.6
Wisconsin ^b	6.4
Wyoming ^b	5.5

Table 4 Note: Percentages are age-adjusted to the 2000 US standard population.

^a State median calculated with 2015 data only.

^b Data from 27 states are from 2014 because 2015 data were not available.

^c Data from 4 states are from 2013 because 2014 and 2015 data were not available.



CDC works to prevent or delay type 2 diabetes by expanding the reach of the National Diabetes Prevention Program (National DPP). This evidence-based intervention teaches participants how to make healthy lifestyle changes that can reduce their risk of developing type 2 diabetes. Since the National DPP was established in 2010, over 1,500 organizations have joined the CDC Diabetes Prevention Recognition Program to deliver the National DPP. More than 100,000 people at high risk of developing type 2 diabetes have participated in lifestyle change programs across the United States.

As of 2016, over 3 million state employees in 11 states have health insurance coverage for the National DPP. About 65 private insurance companies provide some form of coverage for the program. In 2016, the National DPP became the first preventive service program to become

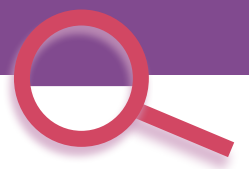


eligible for Medicare payment. About 22 million US adults with prediabetes aged 65 or older could directly benefit from the new Medicare Diabetes Prevention Program, which will take effect in 2018.

In 2016, CDC, the American Diabetes Association, and the American Medical Association partnered with the Ad Council to develop the first national prediabetes awareness campaign. This campaign was designed to help people understand their risk of prediabetes and take steps to prevent or delay the onset of type 2 diabetes.

Public service announcements in English and Spanish encourage people to visit the DoIHavePrediabetes.org website to find out their prediabetes risk. The website features a short quiz, lifestyle tips, and links to CDC-recognized National DPP programs across the country. More than 1 million people have completed the prediabetes risk test.





CDC and its partners have developed several tools to help employers, insurers, health care providers, and states assess the effect of diabetes on their communities and populations of interest. These tools can be used to calculate the economic costs of the disease, evaluate the benefits of implementing the National DPP, and review existing policies related to education and management of diabetes.

Diabetes Prevention Impact Toolkit

CDC developed the [Diabetes Prevention Impact Toolkit](#) to help employers, insurers, providers, and state health departments estimate the health and economic effects of offering the National DPP lifestyle change program to populations at risk of developing type 2 diabetes.¹²

Health Insurance Coverage Laws for Diabetes Self-Management Education and Training

The interactive [Health Insurance Coverage Laws for Diabetes Self-Management and Training](#) website summarizes information about US public and private

insurance policies that require diabetes self-management education and training (DSME/T) for patients with diabetes. The website includes fact sheets about each state's insurance coverage for DSME/T.¹³

Diabetes State Burden Toolkit

The [Diabetes State Burden Toolkit](#) provides state estimates of diabetes burden (prevalence, incidence, and related conditions), economic costs, and deaths. It also presents data about diabetes-related complications; healthy life years lost; and costs related to medical care, absence from work, and lost household productivity.¹⁴

National Diabetes Prevention Program Coverage Toolkit

The [National Diabetes Prevention Program Coverage Toolkit](#) was developed to support Medicaid, Medicare Advantage, and commercial health plans that are considering covering or implementing the National DPP lifestyle change program.¹⁵

The estimates in this report were calculated by staff from CDC's Division of Diabetes Translation and are available in more detail in CDC's [National Diabetes Statistics Report, 2017](#) and from the United States Diabetes Surveillance System. Diabetes data are from the US Census Bureau, the Indian Health Service's National Patient Information Reporting System, and various surveys and data collection systems. These systems include the Behavioral Risk Factor Surveillance System (BRFSS), the National Health Interview Survey, the National Hospital Discharge Survey, and the National Vital Statistics System. To make meaningful comparisons between states and over time, we used the

2000 US standard population to age-adjust our estimated rates. Age adjustment is a statistical process applied to rates of diseases, injuries, and health outcomes. It allows comparisons between communities with different age structures because it proportions rates to a standard age structure. Three-year moving averages are sometimes used to improve the precision of estimates. State estimates in this report card are based on BRFSS data. Because of the limitations of self-reported data in surveys, these estimates may underreport the rates of diagnosed diabetes and prediabetes in the US population.

1. Centers for Disease Control and Prevention. Division of Diabetes Translation website. Reports to Congress. <https://www.cdc.gov/diabetes/library/reports/congress.html>. Accessed September 20, 2017.
2. Patient Protection and Affordable Care Act of 2009. Pub. L No. 111-148, Title X, Sec 10407, 42 USC 247b-9a.
3. Centers for Disease Control and Prevention. [National Diabetes Statistics Report, 2017](#). Atlanta, GA: Centers for Disease Control and Prevention, US Dept of Health and Human Services; 2017.
4. Rutledge SA, Masalovich S, Blacher RJ, Saunders MM. [Diabetes self-management education programs in nonmetropolitan counties — United States, 2016](#). *MMWR Surveill Summ*. 2017;66(10):1–6.
5. Beckles GL, Chou C. [Disparities in the prevalence of diagnosed diabetes — United States, 1999–2002 and 2011–2014](#). *MMWR Morb Mortal Wkly Rep*. 2016;65(45):1265–1269.
6. Luo H, Beckles GL, Zhang X, Sotnikov S, Thompson T, Bardenheier B. [The relationship between county-level contextual characteristics and use of diabetes care services](#). *J Public Health Manag Pract*. 2014;20(4):401–410.
7. US Department of Health and Human Services. Healthy People 2020 website. Social Determinants of Health. <https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health>. Accessed September 1, 2017.
8. Dabelea D, Mayer-Davis EJ, Saydah S, et al. [Prevalence of type 1 and type 2 diabetes among children and adolescents from 2001 to 2009](#). *JAMA*. 2014;311(17):1778–1786.
9. Mayer-Davis EJ, Lawrence JM, Dabelea D, et al. [Incidence trends in type 1 and type 2 among youths, 2002–2012](#). *N Engl J Med*. 2017;376:1419–1429.
10. Saydah S, Imperatore G, Cheng Y, Geiss LS, Albright A. [Disparities in diabetes deaths among children and adolescents — United States, 2000–2014](#). *MMWR Morb Mortal Wkly Rep*. 2017;66(19):502–505.
11. Powers MA, Bardsley J, Cypress M, et al. [Diabetes self-management education and support in type 2 diabetes: a joint position statement of the American Diabetes Association, the American Association of Diabetes Educators, and the Academy of Nutrition and Dietetics](#). *J Acad Nutr Diet*. 2015;115(8):1323–1334.
12. Centers for Disease Control and Prevention. Diabetes Prevention Impact Toolkit website. <https://nccd.cdc.gov/Toolkit/DiabetesImpact>. Accessed May 25, 2017.
13. The Policy Surveillance Program and ChangeLab Solutions. Health Insurance Coverage Laws for Diabetes Self-Management Education and Training website. <http://lawatlas.org/datasets/diabetes-self-management-education-laws>. Accessed May 25, 2017.
14. Centers for Disease Control and Prevention. Diabetes State Burden Toolkit website. <https://nccd.cdc.gov/Toolkit/DiabetesBurden>. Accessed May 25, 2017.
15. National Association of Chronic Disease Directors. National Diabetes Prevention Program Coverage Toolkit website. <http://www.nationaldppcoveragetoolkit.org/>. Accessed July 13, 2017.